

2. (Amended) Process according to Claim 1, wherein the submerged burner(s) is(are) fed with an oxidizer in the form of air, oxygen-enriched air or oxygen.

3. (Amended) Process according to Claim 1, wherein the submerged burner (s) is (are) fed with a fuel in the form of natural gas, fuel oil or hydrogen and/or in that solid-type or liquid type fuel is supplied to the said burner(s).

4. (Amended) Process according to Claim 1, wherein the combustion created by the submerged burner(s) at least partly ensures stirring of the silica and of the halide(s).

5. (Amended) Process according to Claim 1, wherein the combustion created by the submerged burner (s) at least partly generates the water needed for the conversion.

6. (Amended) Process according to Claim 1, wherein the conversion also generates halogenated derivatives or H_2SO_4 .

7. (Amended) Process according to Claim 1. wherein the silicate(s) formed is(are) treated in order to make it(them) compatible with use as one or more vitrifiable batch materials for a glass furnace.

8. (Amended) Process according to Claim 1, wherein the silicate(s) formed is(are) fed hot into a glass furnace.

9. (Amended) Apparatus for carrying out the process according to Claim 1, comprising at least one reactor (1) equipped with one or more submerged burners (3) and at least one means for introducing silica and/or the halide(s) or nitrates or sulfates and optionally liquid type or solid type combustibles, below the level of the materials undergoing melting.

10. (Amended) Apparatus according to Claim 9, wherein the walls (2, 4) of the reactor (1) are provided with refractory materials or with refractory materials lined with a metal lining of the titanium or zirconium type or are based on this type of metal.

11. (Amended) Apparatus according to Claim 9, wherein the walls of the reactor (1) define an approximately cubic, parallelepipedal or cylindrical cavity.

12. (Amended) Apparatus according to Claim 9, wherein the reactor (1) is equipped with means for treating chlorinated effluents or H_2SO_4 or for neutralizing HCl and/or means for separating solid particles from the gaseous effluents.

13. (Amended) The process according to Claim 1 for preparing vitrifiable batch materials for the manufacture of glass.

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14. (Amended) The process according to Claim 1 for preparing raw materials for the manufacture of detergents.

15. (Amended) The process according to Claim 1 for preparing sodium silicate.

16. (Amended) The process according to Claim 1 for the vitrification of wastes of the organo-chloride type.

17. (Amended) The process according to Claim 1 for the treatment of sand polluted by fuel or similar hydrocarbon compounds.

18. (Amended) Process for obtaining glass containing silica and alkali-metal oxides, of the Na_2O or K_2O type and/or alkaline-earth metal oxides of the CaO or MgO type and/or rare-earth oxides of the CeO_2 type, comprising melting vitrifiable materials in which the heat needed for the said melting comes from one or more submerged burner(s) causing turbulence within said vitrifiable material, wherein the vitrifiable materials comprises alkali metals or rare earths or alkaline-earth metals, at least partly in the form of halides, of the said elements.

Please add the following Claims 19-48:

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19. (New) Process according to Claim 1, wherein the alkali metals are Na or K, the alkaline earth metals are Ca or Mg and the rare earth is Ce.

20. (New) Process according to Claim 1, wherein halides are chlorides.

21. (New) Process according to Claim 6, wherein the halogenated derivatives are chlorinated derivatives.

22. (New) Apparatus according to Claim 10, wherein the refracting materials are the electrocast type.

23. (New) Apparatus according to Claim 12, wherein the chlorinated effluents recovered are HCl or Cl.

24. (New) Process according to Claim 1, wherein silica and the halide(s) or nitrates or sulfates and optionally liquid type or solid type combustibles are introduced below the level of the materials undergoing melting.

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25. (New) Process for manufacturing compounds based on one or more silicates of alkali metals and/or alkaline-earth metals and/or rare earths, optionally in the form of mixed silicates which combine at least two of these elements, by the conversion of silica and of halides or sulfates or nitrates of the said alkali metals and/or of the said rare earth and/or of the said alkaline-earth metals, wherein the heat necessary for this conversion is supplied solely by one or more submerged burners.

26. (New) Process according to Claim 25, wherein the submerged burner(s) is(are) fed with an oxidizer in the form of air, oxygen-enriched air or oxygen.

27. (New) Process according to Claim 25, wherein the submerged burner (s) is (are) fed with a fuel in the form of natural gas, fuel oil or hydrogen and/or in that solid-type or liquid type fuel is supplied to the said burner(s).

28. (New) Process according to Claim 25, wherein the combustion created by the submerged burner(s) at least partly ensures stirring of the silica and of the halide(s).

29. (New) Process according to Claim 25, wherein the combustion created by the submerged burner (s) at least partly generates the water needed for the conversion.

30. (New) Process according to Claim 25, wherein the conversion also generates halogenated derivatives or H_2SO_4 .

31. (New) Process according to Claim 25, wherein the silicate(s) formed is(are) treated in order to make it(them) compatible with use as one or more vitrifiable batch materials for a glass furnace.

32. (New) Process according to Claim 25, wherein the silicate(s) formed is(are) fed hot into a glass furnace.

33. (New) Apparatus for carrying out the process according to Claim 25, comprising at least one reactor (1) equipped with one or more submerged burners (3) and at least one means for introducing silica and/or the halide(s) or nitrates or sulfates and optionally liquid type or solid type combustibles, below the level of the materials undergoing melting.

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34. (New) Apparatus according to Claim 33, wherein the walls (2, 4) of the reactor (1) are provided with refractory materials or with refractory materials lined with a metal lining of the titanium or zirconium type or are based on this type of metal.

35. (New) Apparatus according to Claim 33, wherein the walls of the reactor (1) define an approximately cubic, parallelepipedal or cylindrical cavity.

36. (New) Apparatus according to Claim 33, wherein the reactor (1) is equipped with means for treating chlorinated effluents or H_2SO_4 or for neutralizing HCl and/or means for separating solid particles from the gaseous effluents.

37. (New) The process according to Claim 25 for preparing vitrifiable batch materials for the manufacture of glass.

38. (New) The process according to Claim 25 for preparing raw materials for the manufacture of detergents.

39. (New) The process according to Claim 25 for preparing sodium silicate.

40. (New) The process according to Claim 25 for the vitrification of wastes of the organo-chloride type.

41. (New) The process according to Claim 25 for the treatment of sand polluted by fuel or similar hydrocarbon compounds.

42. (New) Process for obtaining glass containing silica and alkali-metal oxides, of the Na_2O or K_2O type and/or alkaline-earth metal oxides of the CaO or MgO type and/or rare-earth oxides of the CeO_2 type, comprising melting vitrifiable materials in which the heat needed for the said melting comes solely from submerged burner(s), wherein the vitrifiable materials comprises alkali metals or rare earths or alkaline-earth metals, at least partly in the form of halides, of the said elements.

43. (New) Process according to Claim 25, wherein the alkali metals are Na or K, the alkaline earth metals are Ca or Mg and the rare earth is Ce.

44. (New) Process according to Claim 25, wherein halides are chlorides.

45. (New) Process according to Claim 30, wherein the halogenated derivatives are chlorinated derivatives.

46. (New) Apparatus according to Claim 34, wherein the refracting materials are the electrocast type.

47. (New) Apparatus according to Claim 36, wherein the chlorinated effluents recovered are HCl or Cl .

48. (New) Process according to Claim 25, wherein silica and the halide(s) or nitrates or sulfates and optionally liquid type or solid type combustibles are introduced below the level of the materials undergoing melting.